

project examples so that we will have more time for questions. The Forest Service research arm is completely separate from the national forest system. It conducts research on any forest and range land, independent of ownership. We have 10 work units or work locations where endangered species work is going on. This covers about 38 different federally listed species.

The state and private forestry program is one which some of you may not know about. This third arm of the Forest Service is involved in providing technical advice on resource management to state foresters and private land owners and administering several federally financed forestry programs. Of course, this program is also subject to the Endangered Species Act. It is very difficult to determine the impact of the act on programs of this type. Both actual and financial assistance and technical assistance given through

the state and private forestry program are subject to the act.

The National Forest Management Act is going to drastically change the planning processes of the Forest Service. Very briefly, some of the things that are going to be required by law now are these: we will set wildlife goals and objectives, inventory all species by habitat types, monitor populations and habitat quantity and quality, quantify species and habitat diversity, prescribe protection and management of critical habitats, and formulate and evaluate alternate management regimes. These are things that must be done now by law, and, of course, endangered species management as well as all wildlife management is tied up in these requirements. I will finish with the thought that as we start making forest plans under the new National Forest Management Act, we will most certainly be calling upon you for help.

PANEL: PART III, THE BUREAU OF LAND MANAGEMENT'S ENDANGERED SPECIES PROGRAM

Richard Verninen¹

ABSTRACT.— It is the responsibility of the Bureau of Land Management (BLM) to conserve plants and animals . . . and the habitat on which they depend . . . which are officially listed according to federal or state laws in categories that imply significant potential for extinction. The BLM also provides for the conservation of the habitats of unlisted extinction-prone (i.e., sensitive) plants and animals. It also applies to all BLM programs and actions related to the public lands, the federal subsurface mineral estate, and the submerged lands of the Outer Continental Shelf (OSC).

The BLM administers 448 million acres of land within the 11 western states and Alaska (U.S. Department of the Interior, BLM 1977). In addition, we are responsible for BLM—authorized actions taking place on the Outer Continental Shelf and federally owned subsurface minerals, i.e., coal, oil and gas, etc. (hereinafter all of the above lands will be referred to as BLM-administered lands).

Within these vast acreages and areas of responsibility we must taken into consideration the welfare of 48 threatened and endangered (T/E) animals (U.S. Department of the Interior, BLM 1977) and 3 endangered plants (Fed-

eral Reg. 6/20/78). The T/E plants and animals occurring on the subsurface and Outer Continental Shelf (OSC) must also be considered if BLM-initiated actions affect a T/E species or its habitat (i.e., oil and gas impacts on marine mammals). A third category of species we must take into account are state T/E species. Our 1977 statistical report listed 138 species of animals.

With the recent passage of the 1978 amendments to the Endangered Species Act of 1973 (ESA), proposed species must also be considered for formal consultation. A number of plants and animals fall into this category.

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LAND USE

All actions that we allow on BLM-administered lands must be considered for impacts on threatened and endangered species (T/E), i.e., oil and gas leases, land exchanges, grazing permits, pipelines, etc.).

The following figures were used for our fiscal year 1979 and 1980 budget that shows actions requiring Section 7 consultation as per ESA of 1973:

Energy	2500 leases (oil/gas, coal, geothermal)
Timber	Sale of 1.25 billion board feet
Grazing	Issuance of 24,000 use authorizations
Wilderness	Completion of 55 studies
State selections	502,900 acres (excluding Alaska)
Rights-of-way	1700 applications
Mineral leasing (other)	63 million acres private 290 million acres other federal lands
Other land actions	8,000 cases

The above are cases or actions readily identifiable. Each day we encounter new actions that require review.

LEGISLATION AND AUTHORITY

Authority-Sources

- A. *Endangered Species Act of 1973* (16 USC 1531 et seq.) as amended.
- B. *Sikes Act, Title II* (16 USC 670 et seq.).
- C. *National Environmental Policy Act* (42 USC 4321 et seq.) as amended.
- D. *The Federal Land Policy and Management Act of October 21, 1976* (P.L. 94-579).
- E. *Department Manual 231.1.1.A.*, General Program Delegation Director, Bureau of Land Management.

The above acts are our basis for developing and carrying out an endangered species program. The major thrust of our program is Section 7 compliance and inventory of habitat.

BLM PROGRAM

Coordination and Liaison, Section 7 Compliance

Section 7 of the ESA of 1973 directs all federal agencies on how to comply with the act. Procedures for this cooperation and consultation can be found in 50 CFR 402 or in the *Federal Register*, volume 43, pages 869-876, 4 January 1978.

The major contact on consultation for BLM is the Fish and Wildlife Service (FWS), but with our administrative responsibilities on the Outer Continental Shelf (OCS) we also consult with the National Marine Fisheries Service of the Department of Commerce. Since many of these OCS cases involve the high seas or foreign countries, we must also contact the State Department. As you can see, the Section 7 process can become exceedingly involved and time consuming.

Because of the mandate placed upon us by Section 7 of the ESA of 1973, major emphasis in work load has been shifted to meet it. Budget increases were added to meet the need. This is a start, but we are working under pressure to meet the demand because of other priorities placed upon us, such as the nation's energy needs.

Critical Habitat Inventory

The president's environmental message of May 1978 requires that the identification and determination of "critical habitats" for endangered species be accelerated.

The secretary of the interior is directing agencies to complete inventories and analyses for the determinations of critical habitats for species on their lands by 1 January 1980.

We have 32 of the known species of animals officially listed on public lands. We have been given increased funds to complete this job. Inventories for some species are fairly simple because their respective habitats are small and centralized. The work begins when we look at species such as the Bald Eagle or the American Peregrine Falcon. Habitats of these species are broad and expansive, requiring many man-hours to complete inventories. Our participation on recovery teams has helped to cut this work load down.

Present Capabilities to Comply with the ESA of 1973

As of 11 November 1978, the BLM has 249 fisheries and wildlife biologists on board. The breakdown by numbers and areas is as follows:

Washington, D.C.	6
Denver Service Center	5
Alaska	9
Arizona	18
California	23
Colorado	22
Eastern States	3
Idaho	22
Montana	26
Nevada	22
New Mexico	15
Oregon	35
Utah	22
Wyoming	18
Outer Continental Shelf	3
Total	249

Within the total 249 biologists, only 2 could be listed as working totally on endangered species, and that is stretching it. We all have other duties as assigned. I myself function as the lead in Washington on nongame species as well as the endangered species liaison officer. Mr. Ken Walker, endangered plant coordinator, will cover the number of botanists we have working on plants.

PANEL: PART IV,
SUMMARY OF THE ENDANGERED PLANT PROGRAM
IN THE BUREAU OF LAND MANAGEMENT

Kenneth G. Walker¹

I'll explain very briefly our function in the Washington office. You may wonder why there are two of us here from the Bureau of Land Management. The primary reason is, because of the organizational structure at the Washington office, the responsibility for en-

SUMMARY

Intensified public concern for our environment and the flora and fauna within it has created a demand for all levels of government to engage in active and positive programs to stem the tide of wildlife extinction. We have embarked on an ambitious program to protect and benefit endangered plants and wildlife. Many of our avenues to success are clouded by complex, competitive demands on endangered species habitat by other resource uses and the nation's need for energy. Unraveling ecological complexities to isolate and solve habitat-related problems is not a simple task. Funding and manpower are not available to meet all needs. Despite these difficulties and constraints, we are devoting our best efforts trying to insure that no additional plant or animal become either endangered or extinct on public lands.

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dangered species coordination is in the Division of Wildlife, with Dick Vernimen as the coordinator for the Bureau of Land Management. My function in the Division of Watershed is to assist or carry on the coordinating role for endangered plant species. The sym-

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